

PROJECTED WORKS, &c.—Tenders have been called for by advertisement for the erection of an engine-house, boiler-house, and other works for the York new water works; the erection of a building for wards to the poorhouse in St. Martin-in-the-Fields; the various works necessary in finishing two villa carcases in Healing Park; the sinking of an artesian well at Nine Elms; the excavation of a patent slip and cutting foundation for sea wall at Harrington harbour; the execution of the works on 6½ miles of the Midland Railway at Leicester; also for fitting up the vestry rooms in the King's-road, Camden-town, with gas-burners, &c.; and for a supply of British and best plate iron for the East-India Company.

VENTILATING BY JET OF STEAM.—At the Polytechnic Institution Dr. Bachhoffner is now illustrating the effect of the steam jet for ventilation, used, as our readers will remember, in the new House of Lords,—showing how water, in its expanded state, can, by displacing large volumes of air, contribute to a purpose as desirable as that of renewing the atmosphere of crowded buildings. Dr. Bachhoffner, by several historical details, proves that the plan of ventilating by steam is not of a date so recent as many imagined, but was brought before the world in the year 1794. In order to shew the displacement of air by steam, the lecturer has a most complete set of mechanical apparatus, and, aided by the enormous hydro-machine of the institution, produced some astonishing effects. Among the results exhibited was the drawing, with immense velocity, of solid bodies, such as eggs and paper, through an iron tube, at the upper part of which a jet of steam was allowed to pass, while pieces of pasteboard and tin were, by the force of the external air, brought into such close contact with the orifice, that considerable force was required for their removal.

HINT IN DECORATION.—Much money, says a foreign correspondent of the *Athenæum*, has been devoted to the repair and decoration of the church of San Andrea at Vercelli: one of the most complete specimens of its style—late Romanesque on the outside, and early Gothic within—that I recollect to have seen. A simple and probable effect of colour has been insured by allowing or simulating the material of the walls, rich red brick, to be seen within: for instance, round the high windows, where the recessed arches and the many jointings take off that heaviness of effect which might have been looked for. Surely now-a-days, when the combination of cheapness and ornament is so difficult a puzzle for poor architects to unravel, and the churchwarden's panacea—whitewash—is so universally at a discount in favour of polychromy, this simple and natural device to enliven and enrich might be worth consideration to our village churches.

A QUERRY.—SIR: Suppose (P) pounds raised one foot high per minute, represented the power required to roll a certain cylinder over a certain uniform inflexible road at a given rate. Also suppose (p) pounds raised one foot high per minute, represented the power required to crush a certain uniform substance placed equally throughout upon that road. [That is, the power required to crush just so much of that substance in any given time, as the cylinder came in contact with during that time.] Question: Would (however great the diameter of the said cylinder, and however great its weight) as much power as (P+p) pounds raised one foot high per minute be required to move the said cylinder on the said road over the said substance at the given rate, that substance being crushed thereby? J. W.

NEW BEACON ON THE GOODWIN SANDS.—On the southern extremity of the shoal, an application of Dr. Pott's pneumatic process for sinking piles has been made by the Trinity House corporation, in the erection of a beacon, the stability of which, it is said, "is rendered a matter of demonstrative certainty." For the foundation, five cast-iron hollow columns, the central one 2 feet 6 inches in diameter, and the others less, were made to sink by atmospheric pressure, while lifting the sand, to a depth of 32 feet, and were then all well secured together by wrought-iron rods and clips. On this the beacon has been erected. The Admiralty, says the *Journal of Commerce*, are adopting Dr. Pott's invention on various parts of the English coast.

EFFECT OF SMOKE ON BUILDINGS.—In a lecture by Dr. Guy last week, at the City of London Literary Institution, he directed attention to "the smoke nuisance," pointing it out as not merely a contaminator, to a considerable extent, of pure air, so necessary to good health, but as most expensive to the community at large, in relation to the frequent occasion which it gives for the washing of linen, for painting, and cleansing of paint and gilding, as productive also of disfigurement of our most beautiful public buildings. In illustration of the damages inflicted by the smoke nuisance he shewed, that expense, by the wear and tear of clothes incurred by washing, and of furniture by cleaning, amounts to half a million sterling per year, and that between the ill effects of the smoke, and of bad drainage, a million and a half of money has been computed to be lost yearly to the public. Now all that might be saved by a legislative enactment, which would compel manufacturers and others, on the one hand, to consume their own smoke, and which, on the other, would create a thorough system of good drainage in our towns, and compel an abundant supply of pure water to every house, with proper ventilation. As an instance of the disfigurement of public buildings by smoke, he directed attention to the new palace at Westminster, which, in the short space of a few years, has been sadly blackened by the volumes of dense smoke poured forth by our river steam-boats. And when they reflected on the immense sum of money already expended, and yet to be expended on that building, and on its costly carvings, and on the richly wrought works of art with which it is to be decorated, they must agree with him that measures ought to be enforced to suppress the smoky nuisance. The lecturer then pointed out the means of abating the nuisance, and as an example of the saving which large consumers, including manufacturers, might, on principles of science and economy, effect by consuming their own smoke, he instanced a manufacturer at Bradford, who saved fully 500*l.* a year by the adoption of the art. One means by which the dense volumes of smoke vomited forth from factory chimneys and steam-boats might be greatly abated, was by feeding the fire frequently with coals in small quantity, instead of at long intervals with a large quantity. Another reason why men should endeavour to suppress the smoke nuisance, was founded on the benefits which such an accomplishment would confer upon the spread and value of the arts. At present, in consequence of its deteriorating effects, men of taste in the arts were deterred from expending money on them to the extent they otherwise would.

'STEEPLE JACK' AT PETERHEAD.—The steeple of the parish church at Peterhead was recently pointed with Roman cement, and the vane repaired, by a native of Dundee, known by the sobriquet of 'Steeple Jack,' who, by means of a common kite, contrived to throw a cord, and by means of that a rope, over the cross-irons below the vane, and then, with a swinging seat at one end of the rope and a counterbalance at the other, running over a pulley on the vane spindle, leisurely accomplished all the necessary repairs.

BLIND BUILDERS.—Under this head some time ago, we gave the tenders for painting Hampstead Church, which shewed a distressing difference in amounts. The builder, whose lowest tender was accepted, has written to say, that he has now completed the work to his own satisfaction as to profit, and that the other contractors must have misunderstood what was necessary, or something worse. Our heading was nevertheless the right one. Whether it applies to the highest or the lowest in cases where we use it, we do not pretend to say.

PROPOSED LUNATIC ASYLUM FOR MIDDLESEX.—Thirty-nine competitors have sent in plans in competition for the proposed asylum at Colney Hatch, with estimates varying from 40,000*l.* to 150,000*l.*!! We are informed that two or three of the architects have disgraced themselves, as was the case in the Army and Navy Club competition, by privately submitting their designs to some of the magistrates before sending them in.

DEATH OF MR. COTTINGHAM, THE ARCHITECT.—We regret to announce, that Mr. Cottingham, long well known as an ecclesiastical architect, died on the 13th inst. at his house, in the Waterloo-road, after a long and painful illness.

ENGLISH BUILDINGS IN CHINA.—A location on the Canton river for warehouses, &c., and a site for a church, have been at length obtained, and at Shanghai our people have got about 100 acres for building, with roads, drainage, &c., all their own. At Hong Kong, every public work and building is now either finished or in progress, except a government house, for which a site and estimates have been got. The Chinese people, however, at Canton, Shingansze, &c., still look upon the English 'barbarian' as if he were 'a Bull in a China shop,' and threaten that stone cutters will be cut all into small pieces, bricklayers 'broken like a tile,' and all and sundry 'looked upon as beasts,' who dare to lift a little finger either in 'supplying with tiles, wood, granite, or other building materials,' or in building for or otherwise aiding and abetting this 'detested brood' in their 'design upon the country.'

LIGHTING BY ELECTRICITY.—A renewed attempt has recently been made to accomplish this great end,—the 'light of nature' itself, it may be;—a patent to that end having been taken out by Mr. Thomas Wright, of Cooper's-hill, Thames Ditton; the chief peculiarity of which consists in the method of producing a permanent light by continually presenting one or more points or surfaces of carbon, or other suitable material, to the path of an electric current.

PATRIARCHAL PLANE TREE.—In the grounds of Kippenross, near Stirling, close by the Scottish Central Railway, there is a magnificent old plane tree, of the following dimensions:—girth of smallest part of trunk, 19 feet; girth close to the ground, 42 feet; extreme width of branches from point to point, 114 feet; height, 100 feet. The cubic contents are 875 feet, and the supposed age upwards of 400 years.

STATE OF THE CHURCH OF ST. GEORGE THE MARTYR.—At a vestry meeting recently held, it was moved by the rector's warden, that a rate of 5*d.* in the pound be assessed for the repairs of the church, which is in a very bad state, and for the necessary improvement of which an estimate of 1,500*l.* had been obtained. An amendment, however, was moved, and the rate refused by the parishioners.

ARCHITECTURE AT UNIVERSITY COLLEGE.—The course of architecture and construction at University College will commence on Tuesday, the 19th, and will continue every Tuesday and Thursday, for the first year's class, at six, and for the second year's class, at a quarter-past seven.

PITT'S SELF-ADJUSTING LOCK FURNITURE AND SPINDLE.—An improvement in the mounting and fixing of door furniture, advertised in our present No., deserves notice. It is the best arrangement of the sort that we have seen.

TENDERS.

The following tenders for the erection of almshouses, chapel, lodges, &c., to be built at Garratt, near Merton, were opened by the managers of the St. Clement's Dances Holborn Estate Charity, in the presence of the parties, at their offices, Essex-street, Strand, on Monday last:—

Lock and Nesham	£16,195
Kelk	15,994
Burton	15,487
Piper	15,286
Hayward and Nixon	15,237
Lawrence	15,246
Grimdell	15,153
Myers	14,890
Andrews, Epsom	14,882
Hicks (accepted)	14,420

TO CORRESPONDENTS.

"District Surveyor's Fee."—The award in question shall have early attention. It has but just now received the assent of the Commissioners of Woods and Forests. Correspondents should not be impatient with us; moreover, we reserve to ourselves a discretion.

"J. W. L."—We will not venture to give an opinion. Its equal construction to the extent of six inches seems unlikely.

"W. A. S."—The M^{rs} was returned, with thanks.

"Constant Subscriber."—The work on "Kitchens" has not been published.

"Review."—R. H. Carpenter, F.R.S., F.R.I., F.R.A.S., F.R.C.S., F.R.C.P., F.R.C.O., F.R.C.V.S., F.R.C.S.D., F.R.C.S.E., F.R.C.S.N., F.R.C.S.I., F.R.C.S.A., F.R.C.S.F., F.R.C.S.G., F.R.C.S.H., F.R.C.S.L., F.R.C.S.M., F.R.C.S.N., F.R.C.S.O., F.R.C.S.P., F.R.C.S.Q., F.R.C.S.R., F.R.C.S.S., F.R.C.S.T., F.R.C.S.U., F.R.C.S.V., F.R.C.S.W., F.R.C.S.X., F.R.C.S.Y., F.R.C.S.Z., F.R.C.S.A., F.R.C.S.B., F.R.C.S.C., F.R.C.S.D., F.R.C.S.E., F.R.C.S.F., F.R.C.S.G., F.R.C.S.H., F.R.C.S.I., F.R.C.S.J., F.R.C.S.K., F.R.C.S.L., F.R.C.S.M., F.R.C.S.N., F.R.C.S.O., F.R.C.S.P., F.R.C.S.Q., F.R.C.S.R., F.R.C.S.S., F.R.C.S.T., F.R.C.S.U., F.R.C.S.V., F.R.C.S.W., F.R.C.S.X., F.R.C.S.Y., F.R.C.S.Z.

"Books, Prints, and Addresses."—We have not time to point out books of bad address.